

**TYPES OF BALKAN BUTTERFLIES. I. TYPE MATERIAL AND
TYPE LOCALITY OF *EREBIA ORIENTALIS* ELWES
(LEP.: NYMPHALIDAE: SATYRINAE)**

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Abstract

The type material of *Erebia orientalis* Elwes, 1901 (Nymphalidae) is discussed.

Introduction

The so called Bulgarian Ringlet was described in 1900 based on material collected in July 1899 by two of the first explorers of the Bulgarian butterfly fauna, Mary de la B. Nicholl and Henry John Elwes, during their expedition to the Rila Mountains (Elwes, 1900: 199). It was initially ranked as a subspecies of *Erebia epiphron* (Knoch, 1783) and treated as such (Warren, 1936: 113) until 1977 when Arnscheid & Roos (1977: 110) elevated its taxonomic status to species level. Subsequently Higgins & Riley (1984: 279) and D'Abrera (1990: 158) again associated it with *epiphron*, while Abadjiev (1993: 50), Tolman & Lewington (1997: 215) and Jaksic (1998: 14) treated it as a distinct species. *Erebia orientalis* is a polytypic species. In addition to the nominate *orientalis* from Rila another subspecies *infernalis* Varga, 1971 (type locality: Vihren: 2300-2400 m [UTM grid reference 34TGM02]) occurs in the nearest Pirin Mts. The colonies of the species occupying higher parts of Stara Planina also differ morphologically, subspecies *macrophthalma* Varga, 1999 (type locality: SW side of Botev Peak, (above Ray Chalet), 1700-1900 m" [UTM grid reference 35TLH23]). All three groups of populations are well separated geographically. The male genitalia of the nominate subspecies are illustrated by Warren (1936: Pl. 28: Fig. 277) and those of the Stara Planina populations by Abadjiev (1995: 134: Fig. 20) and Jaksic (1998: 94: Fig. 75: 6).

The main part of the species range lies inside the Bulgarian territory and the common name introduced by Tolman & Lewington (1997: 215) looked to be somewhat satisfactory (since it was considered to be a Bulgarian endemic), but very recently it was found also in Yugoslavia (Parker & Jaksic, 1996: 95, 96).

Type locality and type material

The exact position of the type locality in the Rila Mts was never mentioned by the author (cf Elwes, 1900: 199-200). Fortunately Nicholl's paper (Nicholl, 1900: 66-67), written like a diary, helped to clear this situation:

"On the 10th [July 1899]... we started for the Marica valley... Next day [11 July 1899]... we proceeded up the valley... till we reached the a beautiful open basin... This basin was decidedly moist, if not actually boggy... July 12th [1899] was... but we resolved stay where we were..."

Comparing the above citation with data label (lectotype labels below) and modern maps the exact locality should be fixed as Rila Mts: Maritsa Valley: 6000 ft [about 1969 m; just above the fusion of Tiha Maritsa and Prava Maritsa rivers] [UTM grid reference 34TGM17] (see Fig. 1).

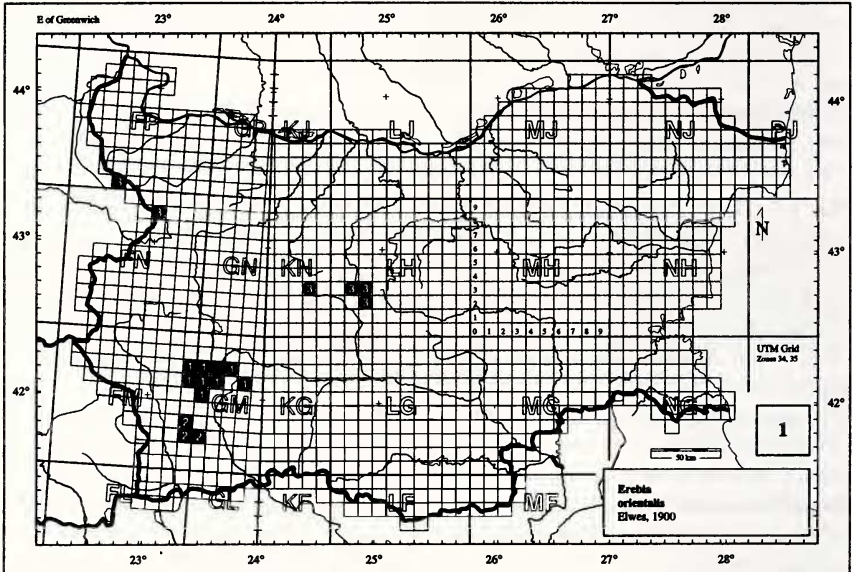


Figure 1. Map of Bulgaria showing the distribution and position of the type locality of *Erebia orientalis* Elwes, 1900: (1) ssp. *orientalis* Elwes; (2) ssp. *infernalis* Varga; (3) ssp. *macrophthalma* Varga.

A lectotype of *Erebia orientalis* was designated and illustrated in black and white by Warren (1936: 113, Pl. 68: Figs. 798, 799 [upperside], 806 [underside]). Later it was depicted in colour by Abadjiev (1995: Pl. XXXI: Figs 6-8).

- **Lectotype** ♀, with labels: (1) printed with handwritten inscriptions [here italicized] (on white paper) “Rilo Dagh, l S. W. Bulgaria. l 6000 ft. 12.7.99. l H. J. Elwes.”; (2) printed (on white paper) “Elwes Coll. l 1902-85”; (3) printed (on white paper) “Photographed l for B. C. S. Warren.”; (4) printed (on white paper) “Illustrated in l Abadjiev, S. 1995 l Butterflies of Bulgaria l Vol. 3: Pl. XXXI: Figs 6-8”; (5) handwritten (on white paper) “orientalis, l Elw. Type ♀”; (6) circle printed (on white paper with red frame) “Type”; (7) circle printed (on white paper with blue frame) “Syn- l type”; (8) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE l No.Rh. 6279 l *E. epiphron* l *orientalis*, l ♀ *Elwes.*.”; (9) printed (on white paper) “SYNTYPE l *Erebia epiphron* l var. *orientalis* l Elwes. l det. P. Ackery, 1991.”; (10) printed (on red paper), double framed “LECTOTYPE ♀ l *Erebia orientalis* Elwes, 1900 l *Erebia epiphron*, var. *orientalis*, l n. var. Elwes, H. J., 1900 l (On the Butterflies of Bulgaria. — l Trans. ent. Soc. London 48 (2): 199 l [line] l label attachment S. Abadjiev 2000”; in coll. The Natural History Museum, London.

— **Paralectotypes** 6 ♂♂, 3 ♀♀ with labels:

- [1] (1) printed with handwritten inscriptions [here italicized] (on white paper) “Rilo Dagh, | S. W. Bulgaria. | 6000 ft. 12.7.99. | H. J. Elwes.”; (2) printed (on white paper) “Elwes Coll. | 1902-85”; (3) printed (on white paper) “Illustrated in | Abadjiev, S. 1995 | Butterflies of Bulgaria | Vol. 3: Pl. XXXI: Figs 4, 5”; (4) handwritten (on white paper) “*orientalis*, | Elw. Type ♂”; (5) circle printed (on white paper with red frame) “Type”; (6) circle printed (on white paper with blue frame) “SYN- | TYPE”; (7) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE | No.Rh. 6278 | *E. epiphron* | *orientalis*, | ♂ *Elwes*.”;
- [2] (1) printed with handwritten inscriptions [here italicized] (on white paper) “Rilo Dagh, | S. W. Bulgaria. | 6000 ft. 12.7.99. | H. J. Elwes.”; (2) printed (on white paper) “Elwes Coll. | 1902-85”; (3) circle printed (on white paper with yellow frame) “Co- | type”; (4) circle printed (on white paper with blue frame) “SYN- | TYPE”; (5) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE | No.Rh. 6280 | *E. epiphron* | *orientalis*, | ♂ *Elwes*.”;
- [3] (1) printed with handwritten inscriptions [here italicized] (on white paper) “Rilo Dagh, | S. W. Bulgaria. | 6000 ft. 12.7.99. | H. J. Elwes.”; (2) printed (on white paper) “Elwes Coll. | 1902-85”; (3) printed (on white paper) “Photographed | for B. C. S. Warren.”; (4) printed (on white paper) “Illustrated in | Abadjiev, S. 1995 | Butterflies of Bulgaria | Vol. 3: Pl. XXXI: Figs 1-3”; (5) circle printed (on white paper with yellow frame) “Co- | type”; (6) circle printed (on white paper with blue frame) “SYN- | TYPE”; (7) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE | No.Rh. 6281 | *E. epiphron* | *orientalis*, | ♂ *Elwes*.”;
- [4] (1) printed with handwritten inscriptions [here italicized] (on white paper) “Rilo Dagh, | S. W. Bulgaria. | 6000 ft. 12.7.99. | H. J. Elwes.”; (2) printed (on white paper) “Elwes Coll. | 1902-85”; (3) circle printed (on white paper with yellow frame) “Co- | type”; (4) circle printed (on white paper with blue frame) “SYN- | TYPE”; (5) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE | No.Rh. 6282 | *E. epiphron* | *orientalis*, | ♂ *Elwes*.”;
- [5] (1) printed with handwritten inscriptions [here italicized] (on white paper) “Elwes Coll. | 1902-85 | *Rilo Dagh* | 6500 | *July 1900*”; (2) circle printed (on white paper with yellow frame) “Co- | type”; (3) circle printed (on white paper with blue frame) “SYN- | TYPE”; (4) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE | No.Rh. 6283 | *E. epiphron* | *orientalis*, | ♂ *Elwes*.”;
- [6] (1) printed with handwritten inscriptions [here italicized] (on white paper) “S W Bulgaria. | M. de la B. Nicholl. | 1900-53 | *Ayrandere Valley*. | 7000 ft.”; (2) circle printed (on white paper with yellow frame) “Co- | type”; (3) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE | No.Rh. 6284 | *E. epiphron* | *orientalis*, | ♂ *Elwes*.”;
- [7] (1) printed with handwritten inscriptions [here italicized] (on white paper) “Rilo Dagh, | S. W. Bulgaria. | 6000 ft. 12.7.99. | H. J. Elwes.”; (2) printed (on white paper) “Elwes Coll. | 1902-85”; (3) circle printed (on white paper with yellow frame) “Co- | type”; (4) circle printed (on white paper with blue frame) “SYN- | TYPE”; (5) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE | No.Rh. 6285 | *E. epiphron* | *orientalis*, | ♀ *Elwes*.”;

- [8] (1) printed with handwritten inscriptions [here italicized] (on white paper) “Rilo Dagh, | S. W. Bulgaria. | 6000 ft. | 12.7.99. | H. J. Elwes.”; (2) printed (on white paper) “Elwes Coll. | 1902-85”; (3) printed (on white paper) “Illustrated in | Abadjiev, S. 1995 | Butterflies of Bulgaria | Vol. 3: Pl. XXXI: Figs 9, 10”; (4) circle printed (on white paper with yellow frame) “Co- | type”; (5) circle printed (on white paper with blue frame) “Syn- | type”; (6) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE | No.Rh. 6286 | *E. epiphron* | *orientalis*, | ♀ *Elwes*”;
- [9] (1) printed with handwritten inscriptions [here italicized] (on white paper) “Bulgaria. | M. de la B. Nicholl. | 1900-53 | *Marica*. | 6500 ft. | 10:VI 99” [The month in the date written here (10 June 1899) is apparently erroneous. It must be July. On 10 June 1899 Mrs Nicholl collected down in the valley of Rilska Reka (cf Nicholl, 1900: 33)]; (2) printed with handwritten inscriptions [here italicized] (on white paper) “Received as | *Erebia epiphron*, | *Knoch*. | from Mrs Nicholl., | F. A. H.”; (3) printed (on white paper) “♀” (4) circle printed (on white paper with yellow frame) “Co- | type”; (5) printed with handwritten inscriptions [here italicized] (on white paper) “B.M. TYPE | No.Rh. 6287 | *E. epiphron* | *orientalis*, | ♀ *Elwes*.”;

paralectotypes 1-5, 7 with printed (on white paper) “SYNTYPE | *Erebia epiphron* | var. *orientalis* | Elwes. | det. P. Ackery, 1991.”; 6 and 9 with handwritten (on white paper) “*Erebia rhodopensis* | Nicholl? Original | description not | traced.”; all the 9 paralectotypes with printed (on red paper), double framed “PARALECTOTYPE ♂ [♀ respectively] | *Erebia orientalis* Elwes, 1900 | *Erebia epiphron*, var. *orientalis*, | n. var. Elwes, H. J., 1900 | (On the Butterflies of Bulgaria. — | Trans. ent. Soc. London 48 (2): 199 | [line] | label attachment S. Abadjiev 2000”; and all in coll. The Natural History Museum, London.

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Hazards of butterfly collecting. “Boys’Own” scientists on the Musandam Peninsula – Oman, 1979

In 1979 I was asked to participate in a multidisciplinary scientific expedition to the Musandam Peninsula in Oman, at the time as remote and inaccessible as you could get it, under the auspices of the Oman Flora & Fauna Survey. The Musandam lies, so to speak on the “horn of Arabia”, jutting out to create the narrow Straits of Hormuz, the strategically important entry point to the Arabian Gulf. Only one previous natural history expedition had visited the area, though a few individual scientists had managed to get there from time to time. Ken Guichard had brought back some butterflies three years earlier.

The Musandam was a small, dirt-poor territory which through the tortuous tribal politics of the region had decided to swear allegiance to the Sultan of Oman rather than to one of the neighbouring Emirates, now forming part of the United Arab Emirates (UAE). The Musandam is thus an enclave within the UAE, separated by 100 km from Oman proper. The landscape is one of jagged mountains with a few rugged valleys; the population eked out a living from raising livestock, plentiful dates, a few patches of flat ground where cereals could be cultivated, and three or four small coastal oases where vegetables could be grown.

Despite the serious nature of the trip, it turned out to be a bit of a “Boys Own” adventure story, starting on the very first day when we were to leave. We, and an amazing amount of kit, piled into an Air Force Shorts Skyvan – the plane that looks like the box it came in, but tough as old boots. We flew to Khasab, the tiny administrative capital, with a diminutive dirt runway that terminated in a sheer valley; you could land only from the North, and take-off only from the South, so wind conditions had to be pretty good. As we lumbered towards Khasab, well of the UAE coast, we noticed some light clouds over the Jabal Akdar, the green mountains that stretch from Oman to the UAE. Just before reaching Khasab, we were told to return to Muscat; a storm had suddenly blown up. As we reached land after skirting the UAE, conditions looked different from on the way up. We suddenly realized that